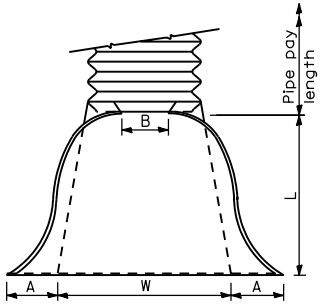
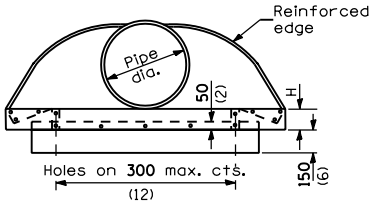
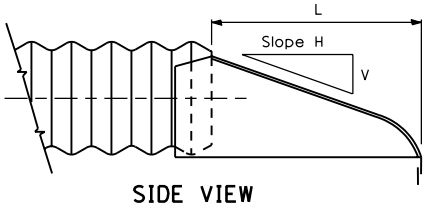
PIPE DIA.	THICK-NESS	DIMENSIONS A	B	H	L	W	SLOPE (Approx.) (V:H)	BODY
		25± (1)	(max.)	25± (1)	38± (1½)	50± (2)		
300 (12)	1.63 (0.064)	150 (6)	150 (6)	150 (6)	535 (21)	610 (24)	1:2½	1 Pc.
375 (15)	1.63 (0.064)	180 (7)	205 (8)	150 (6)	660 (26)	760 (30)	1:2½	1 Pc.
450 (18)	1.63 (0.064)	205 (8)	255 (10)	150 (6)	785 (31)	915 (36)	1:2½	1 Pc.
525 (21)	1.63 (0.064)	230 (9)	305 (12)	150 (6)	915 (36)	1.065 m (42")	1:2½	1 Pc.
600 (24)	1.63 (0.064)	255 (10)	330 (13)	150 (6)	1.040 m (41")	1.220 m (48")	1:2½	1 Pc.
750 (30)	2.01 (0.079)	305 (12)	405 (16)	205 (8)	1.295 m (51")	1.525 m (60")	1:2½	1 Pc.
900 (36)	2.01 (0.079)	355 (14)	480 (19)	230 (9)	1.525 m (60")	1.830 m (72")	1:2½	2 Pc.
1050 (42)	2.77 (0.109)	405 (16)	560 (22)	280 (11)	1.750 m (69")	2.135 m (84")	1:2½	2 Pc.
1200 (48)	2.77 (0.109)	455 (18)	685 (27)	305 (12)	1.980 m (78")	2.285 m (90")	1:2¼	2 Pc.
1350 (54)	2.77 (0.109)	455 (18)	760 (30)	305 (12)	2.135 m (84")	2.590 m (102")	1:2	2 Pc.
1500 (60)	2.77 (0.109)	455 (18)	840 (33)	305 (12)	2.210 m (87")	2.895 m (114")	1:1¾	3 Pc.
1650 (66)	2.77 (0.109)	455 (18)	915 (36)	305 (12)	2.210 m (87")	3.050 m (120")	1:1½	3 Pc.
1800 (72)	2.77 (0.109)	455 (18)	990 (39)	305 (12)	2.210 m (87")	3.200 m (126")	1:1⅓	3 Pc.
1950 (78)	2.77 (0.109)	455 (18)	1.065 m (42")	305 (12)	2.210 m (87")	3.355 m (132")	1:1¼	3 Pc.
2250 (84)	2.77 (0.109)	455 (18)	1.145 m (45")	305 (12)	2.210 m (87")	3.505 m (138")	1:1⅙	3 Pc.



PLAN



END VIEW



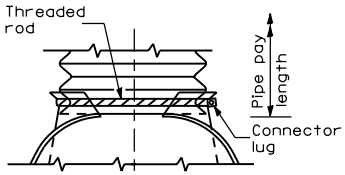
SIDE VIEW

END SECTION

NOTES

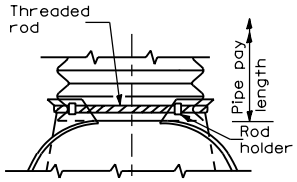
For 1500 mm (60") thru 2250 mm (84") sizes, reinforced edges shall be supplemented with stiffener angles. The angles shall be 51x51x6.4 mm (2x2x¼") for 1500 mm (60") thru 1800 mm (72") diameter and 64x64x6.4 mm (2½x2½x¼") for 1950 mm (78") thru 2250 mm (84") diameter. The angles shall be attached by M10 (⅜") rivets or bolts.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).



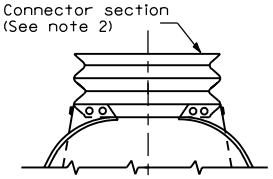
TYPE 1

For **300** (12) thru **600** (24) only (See Note 1)



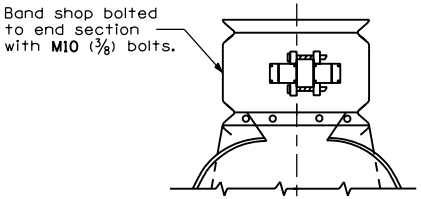
TYPE 2

For **750** (30) and **900** (36) only (See Note 1)



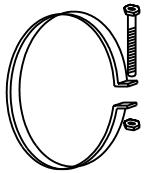
TYPE 3

(See Note 2)



TYPE 4

(See Note 3)



29 (1) Wide, **2.77** (0.109) thick strap with standard **M12x150** (½x6) band bolt and nut.

ALTERNATE STRAP CONNECTOR

(For Type 1 only)

NOTES

1. Types 1 and 2 for pipes with annular ends only.
2. Type 3 connection can be used for all pipe sizes and includes 300 mm (12") of the pipe length. The connector section shall be attached to the end section by rivets or bolts and shall be the same metal thickness as the end section. Stub shall be either 68 mm (2 ⅔") pitch x 13 mm (½") depth or 75 mm (3") pitch x 25 mm (1") depth annular corrugated pipe.
3. Type 4 connection can be used for all pipe sizes. Coupler shall be 68 mm x 13 mm (2 ⅔"x½") dimple, hugger, or annular band of 75 mm x 25 mm (3"x1"). The dimple, hugger, or annular band may be used with corrugated metal pipes having annular ends. For corrugated metal pipes having helical ends, only the dimple band will be allowed.

All dimensions are in millimeters (inches) unless otherwise shown.

CONNECTIONS OF END SECTIONS

Illinois Department of Transportation

PASSED January 1, 1997
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 1997
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
1-1-97	Renum. Standard 2228-5.
6-15-94	Moved 3 Notes to specs.
	Added Metric.

METAL END SECTION FOR PIPE CULVERTS

STANDARD 542401